

Fleet and Monroe Streets

Complete Streets



City of
Rockville
Get Into It

May 4th, 2023

Mead
& Hunt

Introduction / Presentation Outline

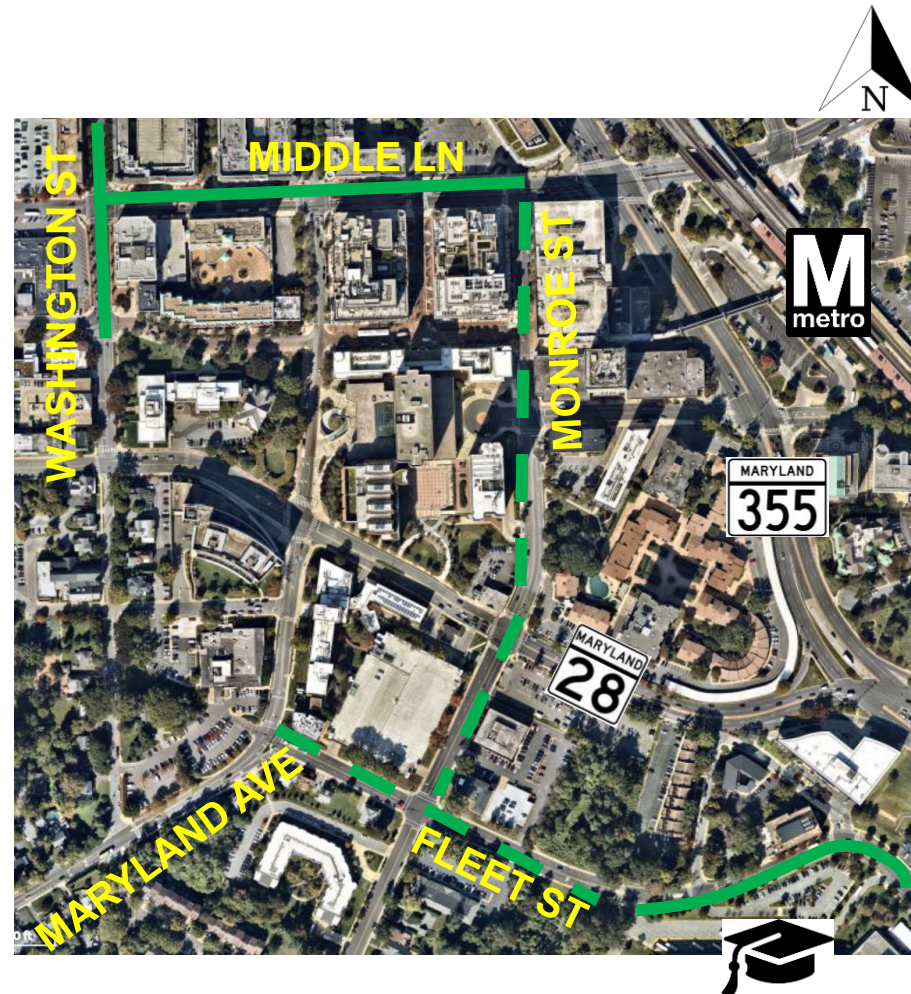
Funding Source:
MWCOC TLC
grant

- Purpose & Need / Project Limits
- Constraints & Opportunities
- Concepts
- Impacts
- Next Steps
- Q&A



Purpose & Need

- Expansion of biking & walking facilities from Town Center core
- Connecting Middle Lane Protected Bike Lanes to Fleet Street and to RMHS and Rockville Metro Station
- Providing *dedicated* walking and biking facilities, *separated* from vehicle traffic
 - Sidewalk and bike path
 - Wide shared use path
 - Sidewalk and protected cycletrack
- Goal: Buy-in on a concept
 - 1) Confirm general design concept
 - 1) Proof of concept (no fatal flaws, traffic congestion mitigated, etc.)
 - 2) Design assumptions addressed during next stage



Constraints & Opportunities

- Constraints
 - Narrow Public Right-of-Way
 - Narrow travel lanes (11' to 12')
 - Curbside on-street parking in Town Center is desirable
- Opportunities
 - Select areas of extra roadway capacity → Opportunity for repurposing travel lanes
 - Grid network allows traffic diversions
 - Improved safety & connectivity will reduce vehicle demand for short trips

Result: Lane Removal on Fleet
and on Monroe

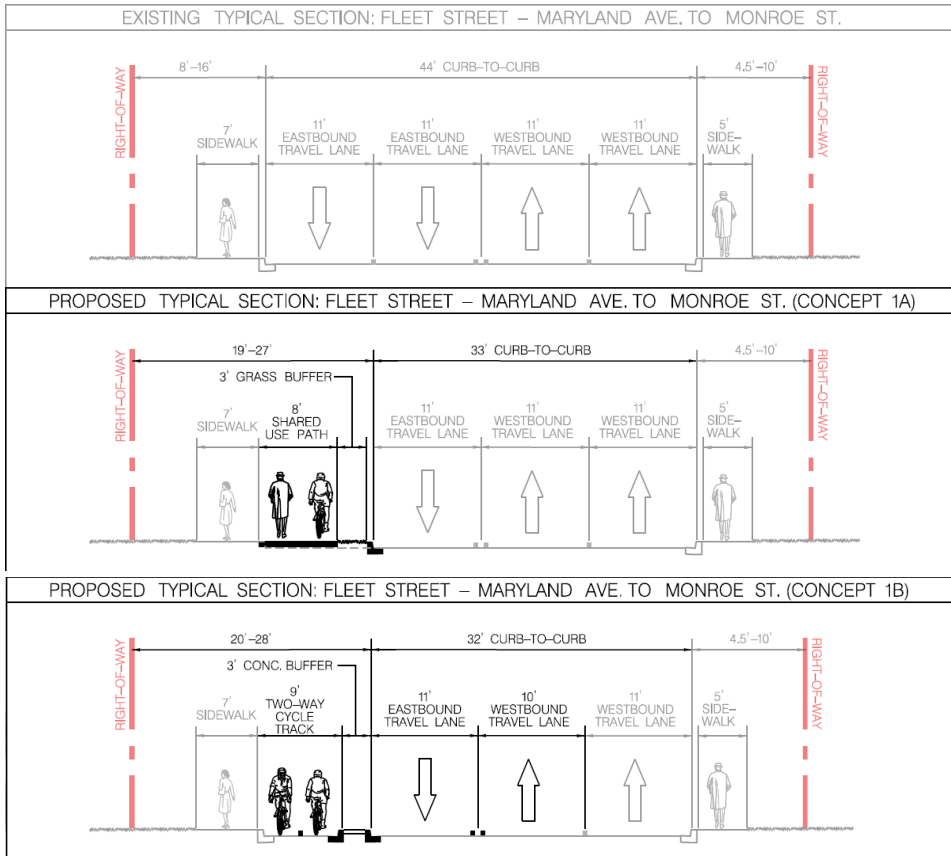


Get Into It



General Discussion of Options

- Side path to replace travel lane
- 2-way cycletrack to replace travel lane
- Combination of each
 - Path on Monroe St
 - driveway conflicts
 - increased activity density
 - Cycletrack on Fleet St

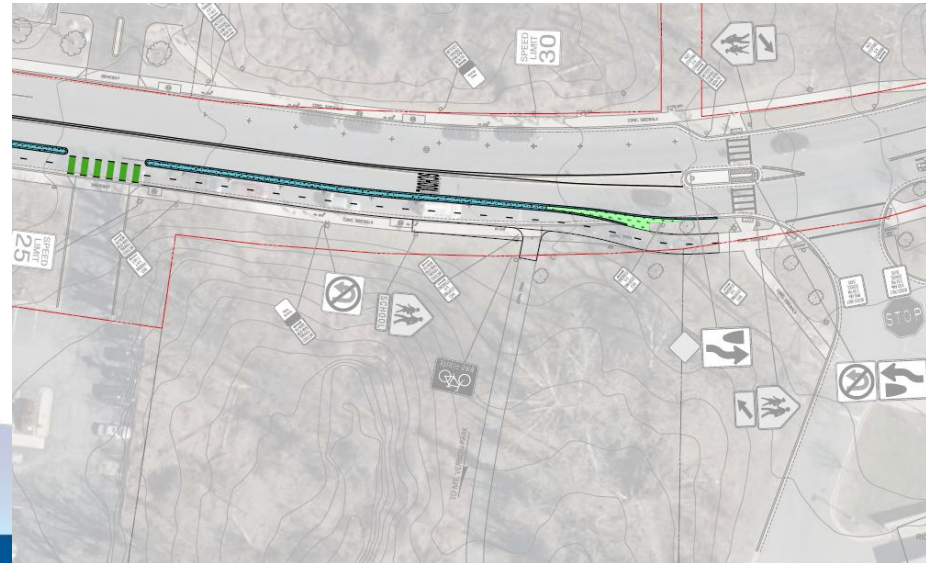
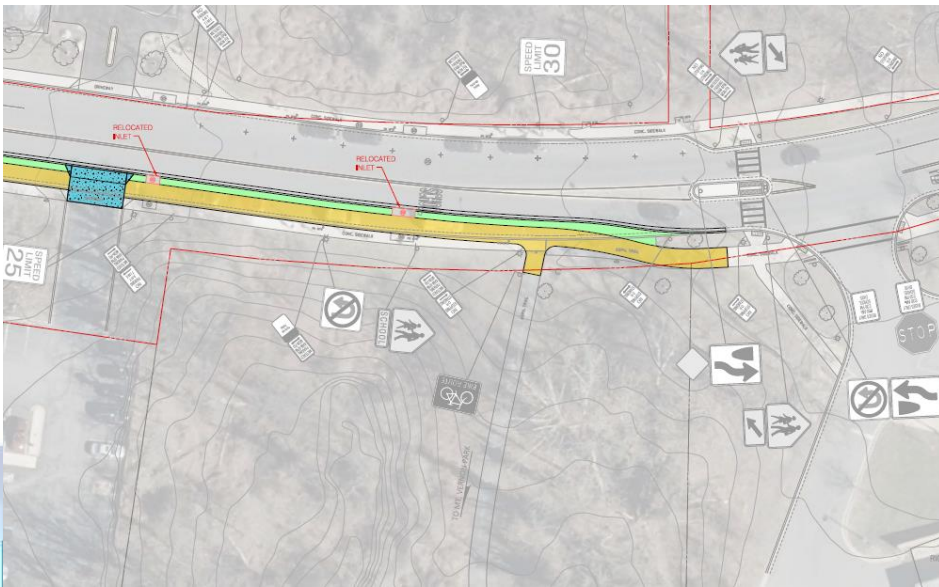


Curbside bike lanes on each side of road was dismissed. Too narrow. Unbuffered. unprotected



Concepts

- General layout of Each Facility Type
 - Bike-only side path
 - Two-way Cycletrack
- Preserves existing sidewalk
- Dedicated facility for bikes and micromobility, e.g., scooters
- Lane Repurposing to calm vehicle traffic



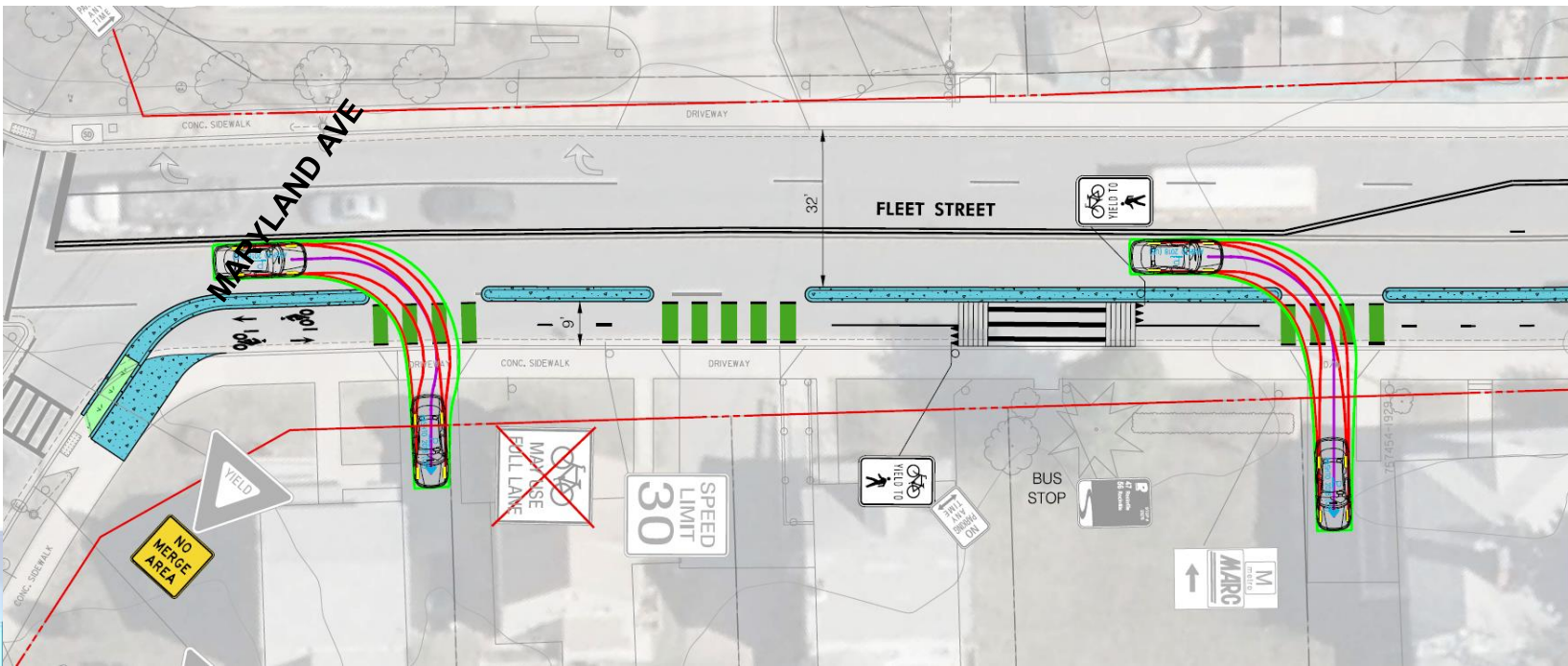
Details and Options for Discussion

- Driveways
- Intersection crossings
 - Fleet St. / Monroe St.
 - Jefferson St. / Monroe St.
- Termination points / Tying into existing infrastructure
- Bus stop
- Traffic impacts
- Construction Cost
- Curbside parking spaces



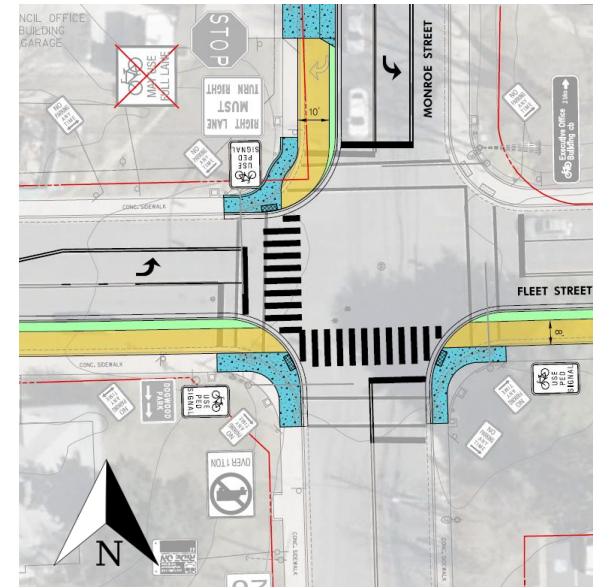
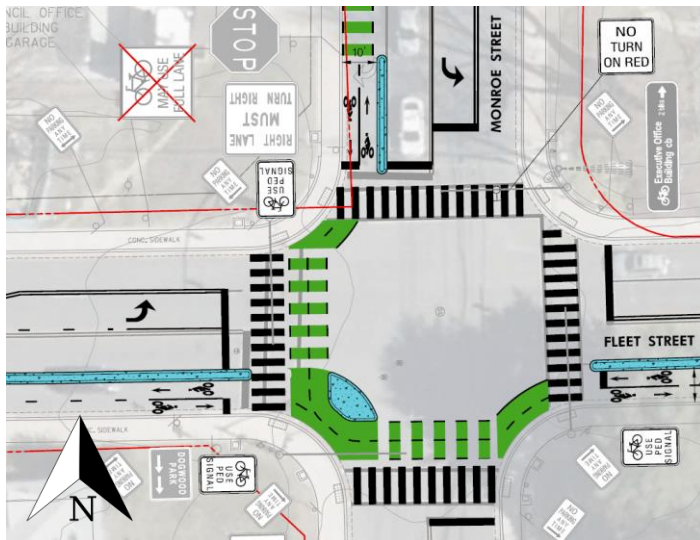
Backing up onto Fleet St

- Adjustments to vertical barriers as need to reflect Turning Movement
 - Drivers will need wider clearance to execute backing maneuvers from driveway



Crossing Fleet / Monroe with WALK

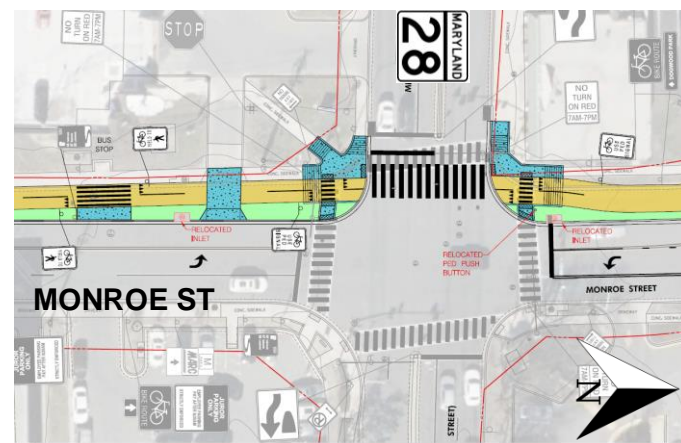
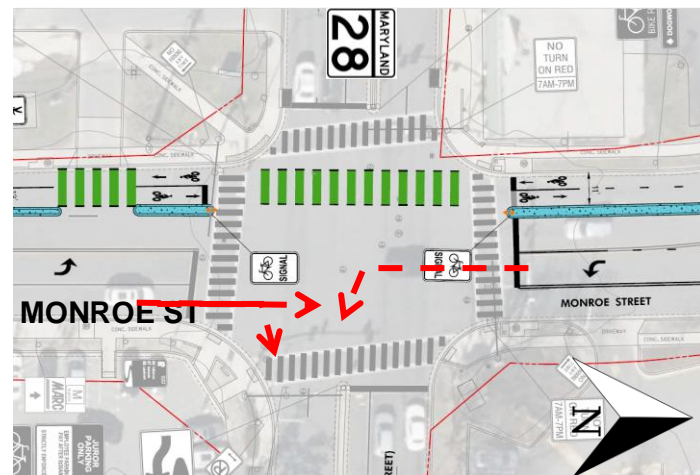
- Shared pedestrian-bike crossing / no signal phase changes
 - Geometric changes desirable to push cyclists into viewshed of southbound right-turning vehicles. Add LPI
- Separated (but simultaneous) bike & pedestrian crossings
 - Protected intersection & LPI
 - Slows vehicles and cyclists at conflict point



Crossing Jefferson (MD 28)

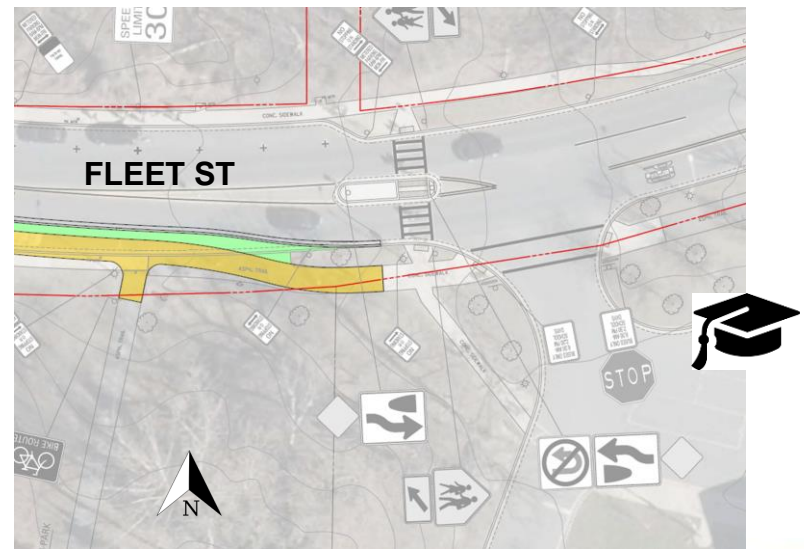
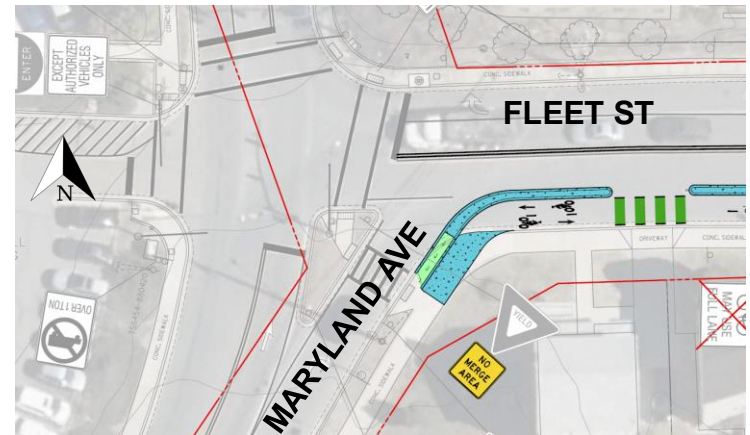


- Bike signals not currently permitted on MDOT SHA roads.
- Per Current SHA standards, bikes can cross with a protected WALK phase. NB protected Left-turn and SB through-rights would have to be held.
 - 1) allow NB through-rights concurrently / SB left permitted
 - 2) restrict left turns and NB is 1 through and 1 right lane
- Shared pedestrian-bike crossing
 - Geometric changes desirable to push cyclists to be more in the viewshed of southbound right-turning vehicles
 - Leading Pedestrian Interval
 - Still would need SHA Concurrence



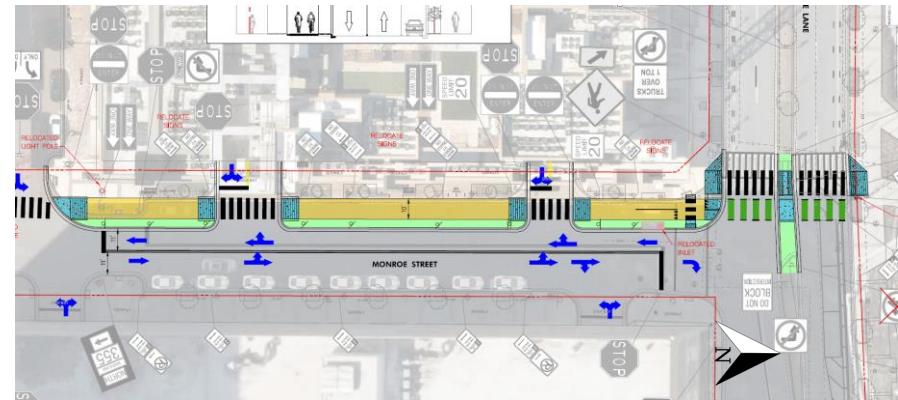
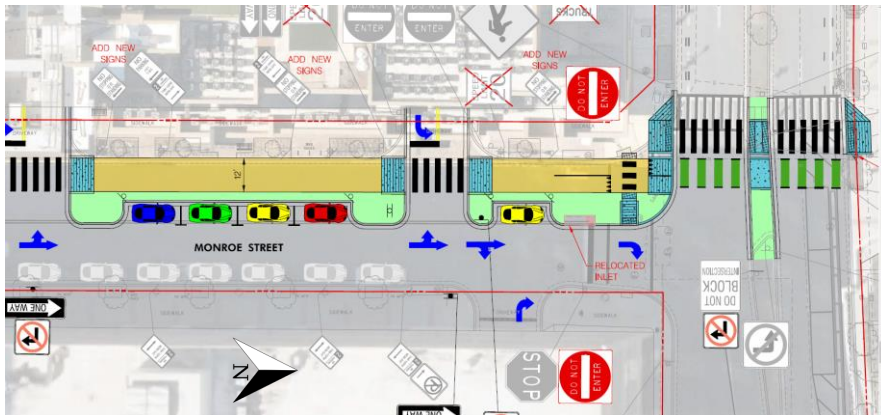
Southern Termini

- At Fleet/Maryland
 - All bike lane/path options have infrastructure terminating at a raised and widened landing area at the southeast corner of Fleet/Maryland
- At RMHS
 - Side path or 2-way facility turns blends into existing side path, just to the west of existing crosswalk across Fleet St and Richard Montgomery High School



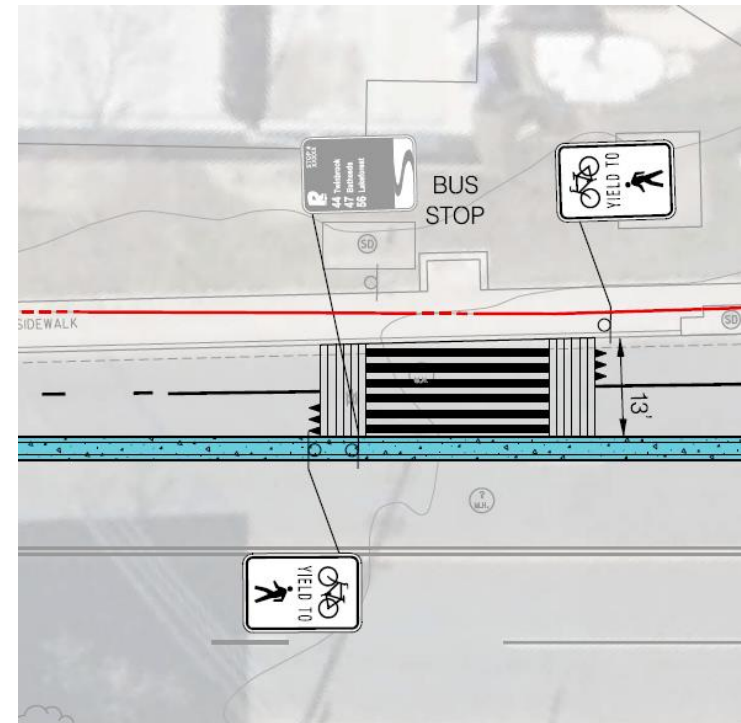
Terminus Options at East Middle Lane

- Both options employ a side path north of Monroe Place
 - However, Curbside Parking on both sides and two-traffic limit space
- North of Montgomery Ave – only 100 cars/day southbound
 - Remove SB lane / Retains curbside parking
 - Optionally, keep SB travel lanes at expense of curbside parking



Accommodating Bus Stop Crossings

- All bus stops remain at current locations
- Bus stops are:
 - widened to allow alighting from both bus doors
 - raised to provide a bus stop level with sidewalk
- Bus boarders cross sidewalk and side path / bicycle lanes
 - raised bus stop, pavement markings, and signs indicate that bicyclists are encroaching on bus stop space and must yield to transit riders



Traffic Impacts: LOS AM (PM)

Intersection	Existing Conditions	Bike Path	2-way Cycletrack <i>exclusive</i> WALK at MD 28	Cycletrack with <i>concurrent</i> NB traffic at MD 28
Monroe St & E Middle Ln	A (B)	A (B)	A (B)	A (B)
Monroe St & E Montgomery Ave	A (A)	A (A)	A (A)	A (A)
Monroe St & Monroe Pl	A (A)	A (A)	A (A)	A (A)
Monroe St & E Jefferson St	B (C)	B (C)	C (D)	C (C)
Monroe St & Fleet St	B (B)	B (B)	B (B)	B (B)
Maryland Ave & Fleet St	C (E)	C (E)	C (E)	C (E)



Spare Capacity on Monroe allows for conversion to one lane in each direction with a center left-turn lane and minimal impact



Construction Cost

- Path Only Option
 - \$1,000,000
- Primary 2-way Cycletrack Option
 - \$400,000

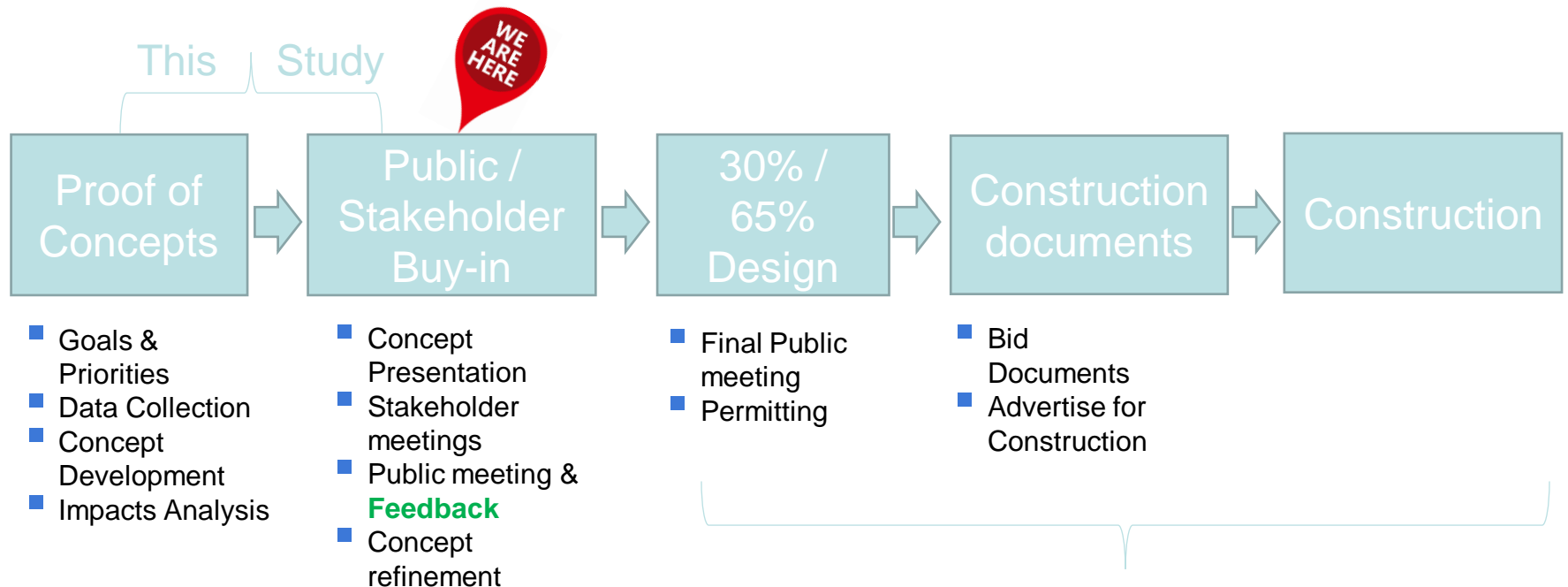
Lost Parking

- All Options will remove 7 spaces on Fleet St, east of Monroe St
- Option for 4 spaces removed on Monroe St between Monroe Place and Montgomery Ave
- Option for 5 spaces removed on Monroe St between Montgomery Ave and Middle Lane

Optionally-lost spaces would be due to retaining two-way driving operations



Next Steps / Project Flow



Questions & Feedback

- City of Rockville, Project Manager
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